Problem 1
Write a program that prompts a user for an integer value in the range 0 to 32,767 and then prints the digits of the numbers on a line with three spaces between the digits. The first line is to start with the leftmost digit and print all five digits; the second line is to start with the second digit from the left and print four digits, and so forth. Each line should be spaced out, so the final rows are in the shape of a triangle. The output must be directed to a file. For example, if the user enters 1234, your program should print

```
0     1     2     3     4
   1     2     3     4
      2     3     4
         3     4
            4
```

Problem 2
Read a floating point number from a file and output it with 2 digits after the decimal point. The number should have at least 6 digits BEFORE the decimal point. Then, extract all digits at even positions from before the decimal point. Print them in order. Then extract all digits at odd positions from before the decimal point and print in reverse order of occurrence.
Number in file: 12345678.9916548

Example Output:

12345678.99
Even positioned digits printed in order – 2 4 6 8
Odd positioned digits printed in reverse order – 7 5 3 1